

	*	20	*	40	*	60	*
exmi006	:	-----MNQNDNNEYEIIDSHTS	PFNPNRNSND	SRYPTNNPNQPLONTNYKE	WLNMCQNGNTQYGDNFET	FAS	: 68
cry1Aa	:	-----	MDNNP	-----NINECIPYNCLSNPEVEVLGC	-----		: 26
cry1Ac	:	-----	MDNNP	-----NINECIPYNCLSNPEVEVLGC	-----		: 26
cry1Ia	:	-----MKLKNQDKHQSFSSNAKVD	-----KISIDS	-----LKNEIDIELQININHEDCLKMSEYEN	-----		: 50
cry3Aa1	:	MIRGGGRKMPNMRSEHDTIKITTENNE	-----VPTNHVQYPLAETPNPTLED	LNLYKEFLRMTADNN	-----TE		: 63
cry3Ba	:	MIRGGGRKMPNMRSEYDTIKVTPNSE	-----LPTNHQYPLADNPNSTLEE	LNLYKEFLRMTADNS	-----TE		: 63
cry4Aa	:	-----MNPYQNKNEYETLNASQKKLN	-----ISNNYTRYPIENS	PKQLLQSTNYKDWLNMCQNNQO	-----YGG		: 59
cry6Aa	:	-----		-----	-----		: -
cry7Aa	:	-----MNLNMLDGYEDSNR	-----TLNNSLNMYPTQKALSPSLKMNMYQD	FLSITEREQP	-----		: 49
cry8Aa	:	-----MSPNNQNEYEIIDATPSTS	-----VSSDSNRYPFANEPTDALQNMNMYKDY	KMSGGENPEL	-----FG		: 58
cry10Aa	:	-----MNPYQNKNEYEIFNAPSNGFS	-----KSNNSRYPLANKPNQPLKNTNYKDWLNVC	QDNQYQYGNM	-----AG		: 62
cry16Aa	:	-----MHYYGNRNEYDILNASSNDS	-----NMSNTYPRYPLANPOODLMQNTNYKDWLNVC	EGYHIENP	-----RE		: 61
cry19Ba	:	-----MMSYQNKNEYEILDAGRNTC	-----HMSNCYPRYPLANDPQMYLRNTHYKDWLNVC	EELASYAS	-----		: 58
cry24Aa	:	-----MNQYQNKNEYEILESSQNNMN	-----MNPYPFADDPNAMKNGNYKDWVNE	CEGSM	-----		: 52

	80	*	100	*	120	*	140	*
exmi006	:	ADTIAAVSAGTIVSGTLLAGIGGLTSISGPIGI	IGAIISFGTLITVFPAGEQDKTVWTQ	FLKMGEIFVDTPLT	:	143		
cry1Aa	:	-ERIETGYTPIDISLSLTQFLSEF	-----VPGAGFVLGLVDIINGIFGPSQ	-----WDAFPVQIEQLINQRIE	:	89		
cry1Ac	:	-ERIETGYTPIDISLSLTQFLSEF	-----VPGAGFVLGLVDIINGIFGPSQ	-----WDAFLVQIEQLINQRIE	:	89		
cry1Ia	:	-VEPFVSASTIQTGIGIAGKILGTG	-----VPPFAGQVASLYSIFILGELWP	-KG--KNQWEIFMEHVEEIIINQKIS	:	117		
cry3Aa1	:	ALDSSTTKDVIQKGISVVGDLGAVG	-----FPFGGALVSFYTNFLNTIWP	S-----EDPWKAFMEQVEALMDQKIA	:	130		
cry3Ba	:	VLDSSSTVKDAVGTGISVVGQILGVVG	-----VPPFAGALTSFYQSFLNAIWP	SD---ADPWKAFMAQVEVLIDKKIE	:	131		
cry4Aa	:	DPETFIDSGELSAYTIWVGTVLTGFG	-----FTTPLGLALIGFTLLIPVLFPADQ	QSN-TWSDFITQTKNIIKKEIA	:	130		
cry6Aa	:	-----		-----				
cry7Aa	:	-EALASGNTAINTVSVTGATLSALG	-----VPGASFTTNFYKLAGLLWPENG	-KI--WDEFMTEVEALIDQKIE	:	116		
cry8Aa	:	NPETFISSTIQTGIGIVGRILGALG	-----VPPFASQIASFYSFIVGQLWPSKS	---VDIWEGEIMERVEELVDQKIE	:	127		
cry10Aa	:	NFASSETIVGVSAGIIVWGTMLGAF	A-----APVLAAGIISFGTLPIFPUQGS	DPAN--VUQDLLNIGRPIQIEID	:	131		
cry16Aa	:	ASVRAGLCKGLGIVSTIVGFFGGS	-----IILDITGLFYQISELLWPEDDT	QQYTQDIMNHVEDLIDKRIT	:	128		
cry19Ba	:	S-----GPSQLFKVGGSIIVAKILG	-----MIPEVGPLLSUMVSLFUP	TIEKNTVJEDNLIKVVANLLKQELT	:	120		
cry24Aa	:	-----ISPSPAAAITSKIVSIVLKTAKAVASS	LADSIKSSLSGISKITITENNVS	-----QVSMVQVHQIINRRIO	:	117		

FIG. 1A

	160	*	180	*	200	*	220	
exmi006 :	ESIKQLKLTLEGFRQILQ-SYNTALDDURKLRQLQAPGLPPSSALQQAALTLKIRFENVHNDFIREIPGFQLE-							: 216
cry1Aa :	EFARNOAISRLGLESLYQ-IYAESFREWEADPTN-----PALREEMRIQFNDMNSALTTAIPLLAVQN---							: 152
cry1Ac :	EFARNOAISRLGLESLYQ-IYAESFREWEADPTN-----PALREEMRIQFNDMNSALTTAIPLLAVQN---							: 152
cry1Ia :	TYARNKALTDLKGLGDALA-VYHDSLESUVGNRNN-----TRARSVKSQYIAELMFVQKLPSFAVSG---							: 180
cry3Aa1 :	DYAKNKALAELOGLQNNVE-DYVSALSUQKNPVSS-----RNPHSQGRIRELFSQAESHFRNSMPSFAISG---							: 196
cry3Ba :	EYAKSKALAELOGLQNNFE-DYVNALDSUKKAPVNL-----RSRRSQDRIRELFSQAESHFRNSMPSFAVSK---							: 197
cry4Aa :	STYISNANKILNRSFNVIS-TYHNHLKTJENNPN-----PQNTQDVRTQIQLVHYHFQNVPIPELVNSCPPN :							: 195
cry6Aa :	-----							:
cry7Aa :	EYVRNKALAEIDGLGSALD-KYQKALADWLCKQDD-----PEALLSVATEFRIIDSLFEFSMPSPKVTG---							: 179
cry8Aa :	KYVKDKALAEKGLGNALD-VYQQSLEDWLEMRND-----ARTRSVVSNQFIALDLNFVSSIPSPFAVSG---							: 190
cry10Aa :	KNIINVLTSTVPIKNQLD-KYQEFQKQEPARTH-----ANAKAVHDLFTTLEPIIDKOLDMLKNNAS---							: 194
cry16Aa :	EVIRGNAIRTLDLQGVYD-DYNNWLKKQKDDP-----KSTGNLSTLVKFTALDSDFNGAIRIVNNQGSP-							: 193
cry19Ba :	MDTLNRATSNLSGLNESLN-IYNRALAAUKQNK-----NNFASGELIRSYINDLHLLFTRDIQDSFSLG---							: 183
cry24Aa :	ETILDGESSLNGLVAIYNRDYLGALAEUNNNKSN-----INYQTNVAEAFKTVEREFFTKLKGITYRTSS---							: 182

  

	*	240	*	260	*	280	*	300
exmi006 :	----	TYKTLLLPIYAQAANFHILNLIQOGAELADEJNADIHPSQIEPNAGTSDDYK-LLENIPKYSNYCANTY :						: 285
cry1Aa :	----	YQVPLL SVYVQAANLHLSVLRDVSVFG-----QRUGFDAATINSRYN-DLTRLLIGNYTDYAVRWY :						: 211
cry1Ac :	----	YQVPLL SVYVQAANLHLSVLRDVSVFG-----QRUGFDAATINSRYN-DLTRLLIGNYTDYAVRWY :						: 211
cry1Ia :	----	EEVPLLPIYAQAANLHLLLRDASIFG-----KEWGLSSSEISTFYM-RQVERAGDYSCHCVKQY :						: 239
cry3Aa1 :	----	YEVFLFTTYAQAANTHILFLKDAQIYG-----EEWGYEKEDIAEFYK-RQLKLTQYTDHCVKQY :						: 255
cry3Ba :	----	FEVFLFTTYAQAANTHILFLKDAQVFG-----EEWGYSSEDIAEFYQ-RQLKLTQYTDHCVNMY :						: 256
cry4Aa :	PSDCDYNNILVLSYAQAANLHLLTVLNQAVKFEAYLKNN-RQFDYLEPLPTAIDYYP-VLTKAIEDYTNVCVTY :							: 268
cry6Aa :	----	MIIDSKTTLPRHSLIHTIKLMSNKKYG-----PGDMTNGNQ----FIISKQEWATIGAYI :						: 51
cry7Aa :	----	YEIPLLTVYAQAANLHLLLRDSTLYG-----DKUGFTQMNIEENYN-RQKRRISEYSDHCTKWY :						: 238
cry8Aa :	----	HEVLLLVYAQAANLHLLLRDASIFG-----EEWGFPTGEISRFFM-RQVQLTAEYSDYCVKQY :						: 249
cry10Aa :	----	YRIPTLPAYAQIATUHLNLLKHAATYNNIULQN-----QGPNSTFNSSNYQGYLKRKIOEYTDYCIQTY :						: 260
cry16Aa :	----	GYELLLL PVYAQIANLHLLLRDAQIYGD-----KWUSARANARDNNYQ-IQLEKTEYTEYCINMY :						: 254
cry19Ba :	----	GYETVLLPSYASAAANLHLLLRDVAIYG-----KELGYPSTDVEFYVM-EQKYYTEKYSNYCVNTY :						: 243
cry24Aa :	----	SQITLLPTFTAANLHLSMLRDAVMYQEG-----UNLQSHINYSKELDDALEDYTNVCVEVY :						: 239

FIG. 1B

	*	320	*	340	*	360	*
exmi006	:	RTGLKNLRDEPN	----	MK-USIFNDYRRYMTITVLDTISQFSLYDIKRYRDSIGGLEVKGIKNELTREIYTTET	:	354	
cry1Aa	:	NTGLERVVGPD	----	SRDWRYNQFRRELTLTVLDIVALFSNYSRRYP	----	IRTVSQLTREIYTNPV	:
cry1Ac	:	NTGLERVVGPD	----	SRDWRYNQFRRELTLTVLDIVALFPNYSRRYP	----	IRTVSQLTREIYTNPV	:
cry1Ia	:	STGLNNLRGTN	----	AESGVRYNQFRDMTLMVLDIVALFPSYDTQMP	----	IKTTAQLTREIYTDAL	:
cry3Aa1	:	NVGLDKLRGSS	----	YESUVNFNRYRREMTLTVDLIALFLYDVRLYP	----	KEVKTELTRDVLTDPI	:
cry3Ba	:	NVGLNSLRGST	----	YDAUVKFNFRREMTLTVDLIVLFPFDVRLYS	----	KGVKTELTRDIFTDPI	:
cry4Aa	:	KKGLNLKITTDP	SNLDGNINUNTYNTYRTKMTTAVLDLVALFPNVDVGKYP	----	IGVQSELTREIYQVLN	:	
cry6Aa	:	QTGLGLPVNEQ	----	QLRTHVNLSDISIPDSFSLYDVVYCSDKTS	----	A-EWGNKNLYPLII	:
cry7Aa	:	NSGLSRLNGST	----	YEQVINYNRFRREMILMALDLVAVFPFHDPRYS	----	METSTQLTREIYVDPV	:
cry8Aa	:	KIGLDKLGKTT	----	SKSULNYHQFRREMTLLVLDLVALFPNYDTHNYP	----	IETTAQLTRDVTYDPI	:
cry10Aa	:	NAGLTMTIRNTN	----	ATUNMYNTYRLEMTLTVDLIALFPNVDPEKYP	----	IGVKSELIREIYTNVN	:
cry16Aa	:	NKGLNDFRTAG	----	QWVNFNRYRREMTLTVDLIIISMFPYIDARLYP	----	TEVKTELTREIYSDVI	:
cry19Ba	:	KSGLESKKQIG	----	WSDFNRYRREMTLSVLDLVALFPYDGLYPSKDG	----	KIHVKAELTREIYSDVI	:
cry24Aa	:	TKGLNALRGST	----	AIDWLEFNSFRDMTLMVLDLVALFPNYPVRYP	----	LSTKISLSRKIYDPI	:

	380	*	400	*	420	*	440	*
exmi006	:	NFDRLPQLRVQPN	----	LATMEYNLTRASFKLFSFLEQIFIFYTENTNFGNRLVGLSNRDAPTYSN	----	TI	:	
cry1Aa	:	LENFDGSGFRG	----	MAQRIEQMIRQ-PHLMIDLNSITTYDVRGFRNYUSGHQITASPVGSGP	----	EF	:	
cry1Ac	:	LENFDGSGFRG	----	SAQGIERSIRS-PHLMIDLNSITTYDAHRGYYUSGHQIMASPVGSGP	----	EF	:	
cry1Ia	:	GTVHPHPSFTSTT	WYNNNAPSFAIEAAVVRN-PHLLDFLEQVTIYSLLS	----	RUSNTQYMMWGGH	----	KL	
cry3Aa1	:	VGNNLRGYG	----	TTFSNLEMYIRK-PHLDYLRHRIQFHTRFQP	----	GYYGND SFNYUSGNYVST	:	
cry3Ba	:	FTLNALQEYG	----	PTFSSSIENSIRK-PHLDYLRGIEFHTRLRP	----	GYSGKDSFNYSUSGNYVET	:	
cry4Aa	:	FEESPVKYYD	----	FQYQEDSLTRRPHLFTWLDLSNFYEKAQTTPNMFTHYNNMFHYTLDNIS	----	Q	:	
cry6Aa	:	KSANDIASYG	----	FKVAGDPSIKKDGFKKLQDELDNIVDNNSDDDAIAKAIDFKARCGILIKEAK	:	170		
cry7Aa	:	SLSISNPDIGP	----	SFSQMENTAIRT-PHLDVLDLDELYIYTSKYKAFSHEIQPDLFYUSAHKVS	----	F	:	
cry8Aa	:	AFNIVTSTGFCNP	USTHSGILFYEVENNVIRP-PHLDILSSVEINTSRGG	----	I-TLMDNAYINYSWGH	----	TL	
cry10Aa	:	SDTFRITITELENG	----	LTWN-----	PTLFTWINQGRFYTRNSR	----	DILDPYDIFSFTGNQMAF	
cry16Aa	:	NCEIYGLMTPYFS	----	FEKAESLYTRA-PHLDYLRGFRFVTNSISYUWTFISGQNKYSYTNNS	----	S	:	
cry19Ba	:	NDHVVGLNVPYIS	----	FEHAESLYTRR-PHAFTLWLGFRFVTNSINSUTFLSGGGRYFLTHGEGT	----	IY	:	
cry24Aa	:	GRDTSFSGDWNTG	----	RTLAFNDLEREVTDSPSLVKWLGMDTIYTGAIDSYRPTSPGDRIGVWYGNINAFYHT	:	373		

FIG. 1C

	460	*	480	*	500	*	520
exmi006	:	TETLYCERIGSPITKTIRPFESYKVSIVDRQSPVSPIQ-PHFIIINQIELYLNQSSNMNLTLYSAGGSLSNYQNT	:	491			
cry1Aa	:	APPLFENAGNAAPP-VLVSLTGLGIFRITLSSPLYRRILGSGPMNQE-LFVLDGTEFFSFASITINLPSTIYRQ--	:	404			
cry1Ac	:	TFPLYGTMGNAAPQORIVAQLGQVYRTLSSTLYRRPFN-IGINNQQ-LSVLDGTEFAYG-TSSNLPsAVYRK--	:	403			
cry1Ia	:	EFRTIGGTLNISTQGSTNTSINPVTLPFTSRDYYRTESLAGNLFLT-QPVNGVPRVDFHUKFVTHPIASDNFFYY	:	439			
cry3Aa1	:	RPSIGSNDIITSPPFYCNKSSPEVQNLEFNGEKKVYRAVANINLAVWPS-AVYSGVTKEVFSQYNDQIDEASTQTYD	:	448			
cry3Ba	:	RPSIGSNDIITSPPFYGDKSIEPIQKLSFDGQKVYRTIANIDIAAFPDKIYFGVIVKDFSQYDDQKNETSTQTYD	:	450			
cry4Aa	:	KSSVFGHNHNVTDKLSLGLATNIYIFLNVISLDNKYLNNDYNNI SKMDFITNGTRILLEKELTAGSGQITTYDVK	:	471			
cry6Aa	:	QYEEAAKNIVTSLDQFLHGDQKKLEGVINIQKRLKEVOTALNOAHGE-SSPAHKEELLEKVKNLKTTLERTIKAEQ	:	244			
cry7Aa	:	KKSEQSNLYTTGTGYKTSGYISSGAYSFHGMIDYRITLAAPSVVYYPY-TQNYGVEQVEFYGVKGVHVRGDNKY-	:	433			
cry8Aa	:	KYRRTADSTVYTYANYGRITSEKNSFALEDROLFEINSTVANLANYY-QKAYGVPGSGWFFHMVKRGTSSTTAYLYS	:	451			
cry10Aa	:	THMDDRNIIIGAVHGNIIISQDTSKVFPFYRNKPIDKVEIVRHREYSDIIYEMIFFSSESSEVFRYSSNSTIENN-	:	448			
cry16Aa	:	EGSFRGQDIDYGGTSTINIPSNVYVNIWNTENVEYIYPGCDPVNITKMNFSVDNNSKELIYGAHRTNKPVR	:	451			
cry19Ba	:	NGPFLGQDTEYGGTSSYIDISNNSSIYNLTKNYEWIYPTDVPNITKINFSITDNNSSSEIYGAERMNKPTVR	:	445			
cry24Aa	:	GRIDVVMFRQTGDTAYEDPSTFISNIIYDDIYKLDLRAAAVSTIQGAMDTTFGVSSSRFFDIRGRNQLYQSNKP-	:	447			

  

	*	540	*	560	*	580	*	600
exmi006	:	-----TFFQFPRKDCNLVIDPGCSPNFMNYSHILSHFSLFITYSYVIGLQLQILDGTGLGUTHSSVDRYNAISD	:	560				
cry1Aa	:	-----RGTVDSLDVIPPQDNSVPPRAGFSHRLSHVTMLSQAG-----AVYTLRAPTFSSQHRSAEFNNIIPS	:	467				
cry1Ac	:	-----SGTVDSLDEIPPNQNNVPPRQGFSHRLSHVSMFRSGFSNS-SVSIIRAPMFSWTHRSAEFNNIIAS	:	468				
cry1Ia	:	PGYAGIG--TQLQDSENELPPEATGQPNVYESYSHRLSHIGLISAS-----HVKALVYSWTHRSADRINTIIEP	:	504				
cry3Aa1	:	SKR---NVGAVSUDSIDQLPETTDEPLEKGYSHQLNVYMCFLMQGS-----RGTIPVLTWTHKSVDFFNMIDS	:	514				
cry3Ba	:	SKRY--NGYLGADSIDQLPETTDEPLEKAYSHQLNYAECFLMQDR-----RGTIPFTTWTHRSVDFFWTIDA	:	517				
cry4Aa	:	N-----IFGLPILKRRENQGNPTLPPTYDNYSHILSFIKLSIPAT-----YKTQVYTFATWTHSSVDPKNTIYT	:	535				
cry6Aa	:	DLEKKVEYSFLLGPLLGFWVVEILENTAVQHIKNQIDEIKKQLD SAQHDLDROWKILGMLNSINTIDINLYSQGQ	:	319				
cry7Aa	:	-----DLITYDSIDQLPPDG--EPIHEKYTHRLCHATAIFKSTP---DYDNATIPFSSWTHRSAEYNNRIYP	:	494				
cry8Aa	:	KIHTALQGCTQVYESSEIPLDRT-VPVAESYSHRLSHITSHSFKNKG--SAYYGSFPVFWTHTSADLNNTIYS	:	523				
cry10Aa	:	-----YKRTDSYMI PKQTUKNEEYGHTL SYIKTDNY IFSVVR-----ERRRVAFSWTHTSVD FQNTIDL	:	507				
cry16Aa	:	-----TD FDFLTN-----KEGTE LAKYNDYMHILSYMLINGETTFGQ-----KRHGYSFATHTSSVD PNNTIAA	:	509				
cry19Ba	:	-----TD FNFLLN-----RAGMGPTTYNDYNHILSYMLINGETTFGQ-----KRHGYSFATHTSSVD RYNTIYP	:	503				
cry24Aa	:	-----YPSLPITITFPGEESSEGNANDYSHLLCDVKILQEDSSNICE-GRSSLLSHAUHTASLD RWNITLP	:	512				

FIG. 1D

	*	620	*	640	*	660	*																																																												
exmi006	:	KIITMIPA	IKGN	LD	TNSK	VEG	PGH	TG	EN	LV	LS	Q	-----	R	E	I	T	C	E	T	P	N	S	T	Q	S	F	I	R	L	R	A	T	N	G	A	N	T	L	:	628																										
cry1Aa	:	SQITQI	PLTK	ST	NL	SG	TS	VV	K	GP	FT	GG	I	L	R	T	S	P	-----	Q	I	S	T	L	R	V	N	I	T	A	P	L	S	Q	R	V	R	R	I	R	A	S	T	T	N	L	Q	F	H	:	537																
cry1Ac	:	DSITQI	PAVK	GN	FL	F	NG	S	V	I	S	-----	G	P	G	T	G	D	L	V	R	L	N	S	G	N	I	Q	N	R	G	Y	E	V	P	I	H	F	P	S	T	S	T	R	V	R	V	R	A	S	V	T	P	I	H	L	N	:	542								
cry1Ia	:	NSITQI	PLV	K	A	F	N	L	S	G	A	A	V	V	R	G	P	G	T	G	D	I	L	R	R	T	N	T	G	-----	T	F	G	D	I	R	V	N	I	M	P	P	F	A	Q	R	V	R	V	R	I	R	A	S	T	T	D	L	Q	F	H	:	574				
cry3Aa1	:	KKITQI	PLV	K	A	Y	K	L	Q	S	A	S	V	A	G	P	R	F	T	G	D	I	I	Q	C	T	-----	N	G	S	A	A	T	I	V	V	P	D	V	S	Q	K	R	A	R	I	H	A	S	T	S	Q	I	T	T	:	584										
cry3Ba	:	EKITQI	PV	K	A	Y	A	L	S	G	A	S	I	E	G	P	G	T	G	D	I	L	F	K	E	S	-----	N	S	I	A	K	F	K	V	T	L	N	S	A	L	L	Q	R	V	R	V	R	I	R	A	S	T	T	N	L	R	L	F	:	589						
cry4Aa	:	HLTQI	PAV	K	A	N	S	L	G	T	A	S	K	V	V	Q	G	P	G	H	T	G	D	L	I	D	F	-----	H	F	K	I	T	C	Q	H	S	N	F	Q	S	F	I	R	I	R	A	S	N	G	S	A	N	T	R	:	601										
cry6Aa	:	EAIK	V	F	Q	L	Q	I	U	A	T	I	G	A	I	E	N	L	R	T	S	L	Q	E	V	Q	S	D	D	A	E	I	Q	I	E	L	D	A	S	A	E	L	V	V	A	Q	E	A	R	D	F	T	L	N	A	Y	S	T	N	S	R	Q	N	L	P	:	394
cry7Aa	:	NKIT	KI	P	A	V	K	M	Y	K	L	D	P	S	T	V	V	K	G	P	G	T	G	D	L	V	K	R	G	S	T	G	-----	Y	I	G	D	I	K	A	T	V	N	S	P	L	S	Q	K	R	V	R	V	R	A	T	N	V	S	G	Q	F	N	:	564		
cry8Aa	:	DKITQI	PAV	K	G	M	L	Y	L	G	S	V	V	Q	G	P	G	T	G	D	I	L	K	R	I	N	P	S	-----	I	L	G	T	F	A	V	T	V	N	G	S	L	S	Q	R	V	R	V	R	I	R	A	S	T	I	D	F	E	T	:	593						
cry10Aa	:	DNITQI	H	A	L	K	V	S	S	D	S	K	I	V	K	G	P	G	H	T	G	D	L	V	I	L	K	D	S	-----	M	D	F	R	V	F	L	K	N	V	S	R	Q	Y	Q	V	R	I	R	A	T	N	A	P	K	T	I	V	:	574							
cry16Aa	:	NKITQI	P	V	V	K	A	S	S	I	N	G	S	I	S	I	E	K	G	P	G	T	G	D	L	V	K	M	R	A	D	S	-----	G	L	T	M	R	F	K	A	E	L	L	D	K	K	Y	R	V	R	I	R	A	S	K	L	I	:	577							
cry19Ba	:	DKIVQI	P	A	V	K	T	N	L	V	G	A	N	I	I	K	-----	G	P	G	H	T	G	D	L	L	K	L	E	Y	E	R	-----	F	L	S	L	R	I	K	-----	L	I	A	S	M	T	F	R	I	R	A	S	N	I	S	G	Q	M	M	:	568					
cry24Aa	:	DEITQI	P	A	V	T	A	Y	E	L	R	G	N	S	S	V	A	G	P	G	S	T	G	D	L	V	K	M	S	Y	H	S	-----	V	U	S	F	K	V	V	C	S	E	L	K	N	Y	R	V	R	I	R	A	S	H	G	N	C	Q	F	L	:	579				

	680	*	700	*	720	*	740	*																																																															
exmi006	:	PNIS	L	T	I	P	G	V	I	G	I	P	Q	R	L	N	M	T	S	G	T	N	Y	N	-----	N	L	Q	Y	G	D	F	G	Y	F	Q	F	P	S	T	V	T	L	P	L	M	R	-----	N	I	P	F	I	F	N	R	A	D	V	S	N	-----	S	I	L	I	D	K	I	:	699
cry1Aa	:	TSID	G	-----	R	P	I	N	Q	N	F	S	A	T	M	S	S	G	S	-----	N	L	Q	S	G	S	F	R	T	V	G	T	T	P	F	M	F	S	N	G	-----	S	S	V	F	T	L	S	A	H	V	F	N	S	G	N	E	V	Y	I	D	R	I	:	601						
cry1Ac	:	VNUG	N	-----	S	S	I	F	S	M	T	V	P	A	T	A	T	S	L	D	-----	N	L	Q	S	D	F	G	Y	F	E	S	A	N	A	F	T	S	S	I	G	-----	N	-----	I	V	G	V	R	N	F	S	G	T	A	G	V	I	D	R	F	:	603								
cry1Ia	:	TSIN	G	-----	K	A	I	N	Q	N	F	S	A	T	M	R	G	E	-----	D	L	D	Y	K	T	F	R	T	V	G	T	T	P	F	S	F	L	D	V	-----	Q	S	T	T	I	G	A	U	N	F	S	S	G	N	E	V	Y	I	D	R	I	:	638								
cry3Aa1	:	LSLD	G	-----	A	P	F	N	Q	Y	F	D	K	T	I	N	K	G	D	-----	T	L	T	Y	N	S	F	N	L	A	S	F	S	T	P	F	E	L	S	G	-----	N	N	L	Q	I	G	V	T	G	L	S	A	G	D	K	V	I	D	K	I	:	646								
cry3Ba	:	VQNS	N	-----	N	D	F	L	V	I	Y	I	N	K	T	M	N	I	D	G	-----	D	L	T	Y	Q	T	F	D	F	A	T	S	N	M	G	F	S	G	D	-----	T	M	D	F	I	I	G	A	E	S	F	V	S	N	E	K	I	Y	I	D	K	I	:	653						
cry4Aa	:	AVIN	L	S	I	P	G	-----	V	A	E	L	G	M	A	L	N	P	T	S	G	I	D	Y	T	N	L	K	Y	K	O	F	Q	Y	L	E	F	S	N	E	V	K	F	A	P	N	Q	-----	N	I	S	L	V	F	N	R	S	D	V	Y	T	N	T	I	V	L	D	K	I	:	672
cry6Aa	:	INVI	S	D	S	C	N	C	S	T	I	N	M	T	S	N	Q	Y	S	N	P	T	I	M	T	S	N	Q	Y	M	I	S	H	E	Y	T	S	L	P	N	N	F	M	L	S	R	N	-----	S	N	E	Y	K	C	P	E	N	N	F	M	I	Y	Q	Y	N	N	S	:	464		
cry7Aa	:	VYIN	D	-----	K	I	T	L	Q	T	K	F	Q	N	T	V	E	T	I	G	E	K	D	L	T	Y	G	S	F	G	Y	E	I	S	T	I	Q	F	P	D	E	-----	H	P	K	I	T	L	H	S	D	L	S	N	N	S	F	Y	V	D	S	I	:	631							
cry8Aa	:	LYLG	-----	D	T	I	E	K	M	R	F	N	K	I	N	D	N	G	A	-----	S	L	T	Y	E	T	T	F	K	F	A	S	I	T	D	Q	F	R	E	T	-----	Q	D	K	I	L	S	M	G	D	F	S	S	G	Q	E	V	Y	I	D	R	I	:	656							
cry10Aa	:	FLTG	-----	I	D	T	S	V	E	L	P	S	T	S	R	Q	N	P	N	A	T	D	L	T	Y	A	D	F	G	Y	V	T	F	P	R	T	V	P	N	K	T	E	G	D	T	L	L	M	T	L	Y	G	T	P	N	H	S	Y	N	I	Y	I	D	K	I	:	644				
cry16Aa	:	LRKK	G	E	-----	G	Y	I	Q	Q	I	H	M	I	S	P	T	Y	G	-----	A	F	S	Y	L	E	S	F	T	I	T	I	E	N	I	F	D	L	T	M	-----	E	V	T	Y	F	Y	G	R	Q	F	V	E	D	I	P	S	L	I	D	K	I	:	642							
cry19Ba	:	INIG	-----	Y	Q	N	P	T	Y	F	M	I	L	I	P	T	T	S	R	D	-----	Y	T	E	L	K	F	E	D	F	Q	L	V	D	T	S	I	Y	S	G	G	P	-----	S	I	S	S	N	T	L	M	D	N	F	S	G	P	V	I	D	K	I	:	632							
cry24Aa	:	MKR	U	P	S	-----	T	G	V	A	P	R	Q	U	A	R	H	N	V	Q	T	F	S	N	S	M	R	Y	E	A	F	K	Y	L	D	I	F	T	I	T	P	E	E	N	-----	F	A	F	T	I	D	L	E	S	G	G	D	L	F	I	D	K	I	:	643						

FIG. 1E

	760	*	780	*	800	
exmi006	:	EFIPITSSMHQNR	---	KQLETIQTKINTFFTNHTKL	---	: 735
cry1Aa	:	EFVPAEVTTEAEYD	---	LEAQKAVNELFTSSNQIGLKTVDYDHYDQVS	:	: 648
cry1Ac	:	EFIPVTATLEAEYN	---	LEAQKAVNALFTSTNQLGLKTNVDYDHYDQVS	:	: 650
cry1Ia	:	EFVPVEVTYAEYD	---	FEKAQEKVTALFTSTNPRGLKIDVKDYHIDQVS	:	: 685
cry3Aa1	:	EFIPVN	---	---	---	: 652
cry3Ba	:	EFIPVQ	---	---	---	: 659
cry4Aa	:	EFLPITRSIREDKQKLETVQI	INTFYANPIKNTLQSELT	DYDIDQAA	:	: 722
cry6Aa	:	DQYNNSDWYNN	---	---	---	: 475
cry7Aa	:	EFIPVDVNYAEKEK	---	LEAQKAVNTLFE-GRNALQKVDYDVKVDQVS	:	: 677
cry8Aa	:	EFIPVDETYEAEQD	---	LEAAKAVNALFTNTKD-GLRPGVTDYEVNQAA	:	: 702
cry10Aa	:	EFIPITQSVLDYTEKQNIKTQKIVNDLFVN	---	---	---	: 675
cry16Aa	:	EFLPTN	---	---	---	: 648
cry19Ba	:	EFIPLGITLNAQAG	---	YDTYDQNAQMYHQWYNSGYNYNQYNTYYQS	:	: 679
cry24Aa	:	EFIPVSGSAFEYEGKQNIKTQKAVNDLFIN	---	---	---	: 674

FIG. 1F